ABSTRACT OF THE DISCLOSURE

An aluminum nitride sintered body comprising crystal grains of an average grain size (D_{50}) of 0.1 to 2.5 μm, and having a pore area ratio of not larger than 1×10^{-7}, a pore density of not larger than 0.05 pores/mm^2 of pores having diameters of not smaller than 1 μm, and a Vickers' hardness in a range of 14 to 17 GPa. The aluminum nitride sintered body has a very small pore density despite of its relatively small crystal grain size, features excellent strength and mirror machinability, and is particularly useful as a material for circuit substrates on which fine wiring patterns are formed.